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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/659,677	09/10/2003	Nicholas E. Buris	CE11928JAN	3729
24273	7590	05/17/2007		
MOTOROLA, INC INTELLECTUAL PROPERTY SECTION LAW DEPT 8000 WEST SUNRISE BLVD FT LAUDERDAL, FL 33322			EXAMINER TRAN, PABLO N	
			ART UNIT	PAPER NUMBER
			2618	
			MAIL DATE	DELIVERY MODE
			05/17/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/659,677

Applicant(s)

BURIS, NICHOLAS E.

Examiner

Pablo N. Tran

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 20 February 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-3, 6-10, 13-17, 19, and 21-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Iwai et al. (US2003/0117324) in view of Shoji et al. (US2002/0169010).

As per claims 1, 6, 9-10, 16-17, 19, and 21-23, Iwai et al. disclosed a cellular telephone (fig. 17a, fig. 17b), comprising having an antenna (fig. 15b/no. 505), a metallized housing (fig. 10, [0252]) coupled to the antenna and having a movable section that can be placed in an open or closed position, and a slot (fig. 17a/no.506, fig. 17b/no. 507) located on the movable section.

Iwai et al. is silent about such slot directs existing electrical current flowing in the metallized housing to take different paths or lengths to at least increase the bandwidth of the antenna. Shoji et al. teaches such method (fig. 8, [0011, 0036]. It is clear that by having a slot on the ground conducting casing-surface, the current occurred on the ground-conducting casing when the antenna is transmitting/receiving introduces

multiple resonances frequency. Also, see specification [0019]). Therefore, it would have been obvious to one of ordinary skill in the art to provide such method, as taught by Shoji et al., to the communication apparatus of Iwai et al. to improve the antenna transmission.

As per claims 2-3 and 13-14, the modified wireless terminal of Iwai et al. and Shoji et al. further disclosed the metallized housing includes a flip section that can move between an open position and a closed position and the slot is located on the flip section (see Iwai et al., fig. 17a, see Shoji et al., fig. 1, fig. 8).

As per claim 7, the modified wireless terminal of Iwai et al. and Shoji et al. further disclosed whip and helical antenna (see Iwai et al., [0010, 0236])).

As per claim 8, the modified wireless terminal of Iwai et al. and Shoji et al. further disclosed the antenna is electrically coupled to the metallized housing which is grounded (see Shoji et al., fig. 4, [0032]).

As per claim 15, the modified wireless terminal of Iwai et al. and Shoji et al. further disclosed a portion of the antenna is located external to the metallized housing (see Iwai et al., fig. 15b).

As per claims 4-5, 11-12, 18, and 20, the modified wireless terminal of Iwai et al. and Shoji et al. disclosed that such slot can adjusted to various shape and dimension (see Shoji et al., [0011, 0036]) but not explicitly such "L" shaped slot. However, such is notoriously well known in the art that the examiner takes Official Notice of such. Therefore, it would have been obvious to one of ordinary skill in the art to provide such shaped slot to the modified wireless terminal of Iwai et al. and Shoji et al. in order to

effectively enhance the bandwidth performance for a desired configuration of the portable telephone.

### ***Response to Arguments***

3. Applicant's arguments with respect to claims 1-23 have been considered but are moot in view of the new ground(s) of rejection.
4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

### ***Conclusion***

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Pablo Tran whose telephone number is (571)272-7898.

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The examiner normal hours are 9:30 -5:00 (Monday-Friday). If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Urban, can be reached at (571)272-7899. The fax phone number for the organization where this application or proceeding is assigned is (571)273-8300.

6. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) System. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-directauspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

May 12, 2007

**PABLO N. TRAN**  
**PRIMARY EXAMINER**

A handwritten signature in black ink, appearing to be 'P. Tran', with a long horizontal stroke extending to the right.

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